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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,827	10/30/2003	Tetsuo Asada	117637	7178
<div>25944 7590 07/27/2007 OLIFF &amp; BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320</div>				
			EXAMINER MORRISON, THOMAS A	
			ART UNIT 3653	PAPER NUMBER
			MAIL DATE 07/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/695,827	<b>Applicant(s)</b> ASADA, TETSUO	
	<b>Examiner</b> Thomas A. Morrison	<b>Art Unit</b> 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6, 7, 9-15, 17, 18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 and 20-22 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 6, 12-15 and 17 is/are allowed.
- 6) ☒ Claim(s) 7 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date: _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/30/07</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 1 and 12 are allowable. The restriction requirement directed to Figs. 2, 6, 10 and 12, as set forth in the Office action mailed on 12/30/2004, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 821.04(a). **The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim.** Claims 2-3 and 13-14, directed to location of the trailing edge detector are no longer withdrawn from consideration because the claim(s) requires all the limitations of an allowable claim. However, claims 9-11 and 20-22, directed to non-elected species are withdrawn from consideration because dependent claims 9 and 20 require a first roller with a circular cross-section, which is contrary to the sector roller set forth in independent claims 1 and 12 of applicant's 4/30/07 amendment. Also, dependent claims 10-11 and 21-22 require a sheet feed roller movable toward and away from a wall, which is contrary to the sheet feed roller arrangement of the elected species (i.e., Fig. 2) that is not vertically movable. More specifically, the structure recited in claims 10-11 and 21-22 appears to conflict with the structure disclosed in the elected species (i.e., Fig. 2) and claimed in independent claims 1 and 12 of applicant's 4/30/07 amendment. In addition, the structure set forth in claims 10-11 and 21-22 is not an obvious variation of the structure set forth in independent claims 1 and 12 of applicant's 4/30/07 amendment. Thus, claims 1-4, 6-7, 9-15, 17-18 and 20-22 are pending, with claims 9-11 and 20-22 remaining withdrawn from further consideration.

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 depends from claim 6, which ultimately depends from independent claim 1. Independent claim 1 recites, "wherein the trailing edge detector comprises a collar shaft, a collar fixedly attached to that collar shaft to be rotatable with the collar shaft, a **disk** coaxially attached to the collar shaft, **and a rotation sensor that detects rotations of the disk**". (emphasis added). After this, dependent claim 7 recites, "wherein the trailing edge detector comprises **a disk** coaxially attached to the rotational shaft, and **a rotation sensor that detects rotations of the disk**." It is unclear if the recited "a disk" and the recited "a rotation sensor" in claim 7 are the same or different

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from the previously recited “a disk” and “a rotation sensor”, respectively, in independent claim 1. In other words, it is unclear how many different disks and rotation sensors are claimed in claim 7.

Claim 18 depends from claim 17, which ultimately depends from independent claim 12. Independent claim 12 recites, “wherein the trailing edge detector comprises a collar shaft, a collar fixedly attached to that collar shaft to be rotatable with the collar shaft, **a disk** coaxially attached to the collar shaft, **and a rotation sensor that detects rotations of the disk**”. (emphasis added). After this, dependent claim 18 recites, “wherein the trailing edge detector comprises **a disk** coaxially attached to the rotational shaft, and **a rotation sensor that detects rotations of the disk**.” It is unclear if the recited “a disk” and the recited “a rotation sensor” in claim 18 are the same or different from the previously recited “a disk” and “a rotation sensor”, respectively, in independent claim 12. In other words, it is unclear how many different disks and rotation sensors are claimed in claim 18.

### ***Allowable Subject Matter***

3. Claims 1-4, 6, 12-15 and 17 are allowed. Claims 7 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

**Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

7/22/2007

  
PATRICK MACKEY  
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